

REMARKS/ARGUMENTS

Claims 1-23 and 38-59 are pending. Claims 9, 12, 19, 21, 23, 44, and 46 were previously withdrawn and claims 24-37 were previously canceled. Claims 1-8, 10, 11, 13-18, 20, 22, 38-43, 45, and 47-59 are under examination and stand substantively rejected. In this Amendment, independent claims 1, 14, 38, and 47 are amended, claims 5, 6, 8, 15, 16, 18, 40, 41, and 43 are canceled, and new claims 60 and 61 are added. Reconsideration is respectfully requested.

Applicant's undersigned representative thanks the Examiner for the courtesies extended during a telephone conference of November 30, 2010.

Claim Amendments

Support for amended claim 1, 14, 38, and 47 can be found in the specification at, for example, page 27 lines 22-24. Support for new claim 60 can be found in the specification at, for example, page 30 lines 29-33. Support for new claim 61 can be found in the specification at, for example, page 16 lines 5-9. No new matter is introduced.

First Rejection Under 35 U.S.C. §103

Claims 1-8, 10, 11, 13-18, 20, 22, 38-43, 45, 47-52, and 56-59 were rejected under 35 U.S.C. §103(a) as allegedly obvious over US 6,277,117 ["Tetzlaff"] in view of US 6,807,968 ["Francischelli"] and further in view of US 5,755,760 ["Maguire"]. This rejection is addressed as follows.

It is well established that a *prima facie* case of obviousness requires, among other things, a showing that all claim elements are considered when determining patentability against the cited references. Applicants submit that the combination of Tetzlaff, Francischelli, and Maguire does not meet this test as applied to the amended pending claims.

Amended claim 1 is drawn to an apparatus for use with a clamp. The apparatus includes, among other things, a tissue stimulation apparatus configured to provide pulses of tissue stimulation energy varying in amplitude over a range of 1mA to 20mA, and a stimulation electrode coupled with the tissue stimulation apparatus.

Maguire discusses a cardiac mapping electrode (52) and the sentence bridging pages 5 and 6 of the Office Action states that electrosurgical generators providing stimulative/mapping pulses/energy would have been known to the artisan.

It has not been shown, however, that the artisan would have known of a tissue stimulation apparatus configured to provide pulses of tissue stimulation energy varying in amplitude over a range of 1mA to 20mA.

Such a tissue stimulation apparatus can be used to determine lesion depth. As described in the instant disclosure at, for example, page 27 lines 12-24, heart tissue stimulation depends on certain current densities. Hence, by varying the amplitude of the stimulation energy pulses over a range of 1 to 20mA, it is possible to determine how far viable tissue is from the electrode.

Because the combination of Tetzlaff, Francischelli, and Maguire does not disclose a tissue stimulation apparatus configured to provide pulses of tissue stimulation energy varying in amplitude over a range of 1mA to 20mA, the references do not support a *prima facie* case of obviousness for amended independent claim 1. Amended independent claims 14, 38, and 47 involve similar tissue stimulation apparatus elements, and hence the combination of Tetzlaff, Francischelli, and Maguire does not support a *prima facie* case of obviousness for these claims as well. With regard to the presently pending dependent claims, claims 2-8, 10, 11, 13, and 53-59 depend from claim 1, claims 15-18, 20, and 22 depend from claim 14, claims 39-43 and 45 depend from claim 38, and claims 48-49 and 52 depend from claim 47. These dependent claims are therefore allowable as depending from allowable base claims, as well as for the nonobvious combination of elements they recite. Withdrawal of this rejection is requested.

Second Rejection Under 35 U.S.C. §103

Claims 53 and 54 were rejected under 35 U.S.C. §103(a) as allegedly obvious over Tetzlaff, Francischelli, and Maguire.

As noted above, amended base claim 1, from which claims 53 and 54 depend, is patentable in view of Tetzlaff, Francischelli, and Maguire. Withdrawal of this rejection is requested.

New Claims

New claim 60 involves an apparatus having an electrosurgical power supply and control apparatus, a tissue stimulation apparatus configured to provide pulses of tissue stimulation energy varying in amplitude over a range of 1mA to 20mA, and an EP recording apparatus storing an expected propagation delay. As noted above, the combination of Tetzlaff, Francischelli, and Maguire does not disclose a tissue stimulation apparatus configured to provide pulses of tissue stimulation energy varying in amplitude over a range of 1mA to 20mA. Moreover, the combination of Tetzlaff, Francischelli, and Maguire does not disclose an EP recording apparatus storing an expected propagation delay. For at least these reasons, new claim 60 is patentable in view of Tetzlaff, Francischelli, and Maguire.

New claim 61 involves an apparatus having a tissue stimulation apparatus configured to provide pulses of tissue stimulation energy varying in amplitude over a range of 1mA to 20mA. The source of stimulation energy is switchable between a bipolar mode and a unipolar mode, such that when in the bipolar mode the source of stimulation energy is operable to transmit stimulation energy to the first stimulation element and receive stimulation energy from the second stimulation element, and when in the unipolar mode the source of stimulation energy is operable to transmit stimulation energy to both the first stimulation element and the second stimulation element. As noted above, the combination of Tetzlaff, Francischelli, and Maguire does not disclose a tissue stimulation apparatus configured to provide pulses of tissue stimulation energy varying in amplitude over a range of 1mA to 20mA. Moreover, the combination of Tetzlaff, Francischelli, and Maguire does not disclose a source of stimulation energy that is switchable between a bipolar mode and a unipolar mode, such that when in the bipolar mode the source of stimulation energy is operable to transmit stimulation energy to the first stimulation element and receive stimulation energy from the second stimulation element, and when in the unipolar mode the source of stimulation energy is operable to transmit stimulation energy to both the first stimulation element and the second stimulation element. For at least these reasons, new claim 61 is patentable in view of Tetzlaff, Francischelli, and Maguire.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 303-571-4000.

Respectfully submitted,

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